



# FLIGHT REPORT

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD  
SFN 50864(12/2014)

|                         |                       |                     |                   |         |
|-------------------------|-----------------------|---------------------|-------------------|---------|
| ENGINES OFF<br>21:30:47 | HOURS<br>3.18         |                     | PAGE #<br>1       | OF<br>3 |
| ENGINES ON<br>18:20:01  | DRY ICE RATE<br>0     | 1 GEN<br>0.96       | 2 GEN<br>1.50     |         |
| TOTAL TIME<br>03:10:46  | DRY ICE (lbs)<br>0.00 | EJCTBL (grams)<br>0 | BIP (grams)<br>75 |         |

| DATE<br>June 29, 2017 |            | DISTRICT<br>1     | SEED #<br>1        | PILOT<br>Kirk Hamilton |                   |                     |              | COPILOT<br>Shelby Scorse |                  |        |     | PURPOSE<br>H      | REMARKS<br>R - Rain H - Hail O - Other<br>M - Maintenance<br>C - Reconnaissance |
|-----------------------|------------|-------------------|--------------------|------------------------|-------------------|---------------------|--------------|--------------------------|------------------|--------|-----|-------------------|---|
| Time<br>(HH:MM)       | EVENT<br># | LATITUDE<br>(deg) | LONGITUDE<br>(deg) | CLD BASE<br>(kft)      | ALTITUDE<br>(KFT) | UPDRAFT<br>(FT/MIN) | TEMP<br>(°C) | PRECIP<br>CODE**         | DRY ICE<br>(sec) | FLARES |     | WINTIP<br>GEN (#) |   |
|                       |            |                   |                    |                        |                   |                     |              |                          |                  | EJC    | BIP |                   |   |
| 18:21:55              |            | 46.17073          | -103.3042          |                        | 2.9               |                     |              |                          |                  | 0      | 0   | 0                 | Engines on in Bowman.   |
| 18:32:01              |            | 46.13297          | -103.4298          |                        | 7.3               |                     |              |                          |                  | 0      | 0   | 0                 |   |
| 18:41:40              | 1          | 46.10523          | -103.9771          | 8.5                    | 8.1               | 200                 | 9            | 1                        |                  | 0      | 0   | 1                 | Right burner on.  |
| 18:47:20              |            | 46.09712          | -103.9442          | 8.5                    | 8.2               | 400                 | 9            | 1                        |                  | 0      | 0   | 1                 |   |
| 18:57:22              |            | 46.06188          | -103.9284          |                        | 8.3               |                     |              |                          |                  | 0      | 0   | 1                 |   |
| 18:59:45              |            | 46.06519          | -103.9066          | 8.5                    | 8.3               | 400                 | 9            | 2                        |                  | 0      | 0   | 1                 |   |
| 19:08:25              |            | 46.17106          | -103.9045          | 8.7                    | 8.8               | 600                 | 9            | 2                        |                  | 0      | 0   | 1                 |   |
| 19:09:11              | 2          | 46.14311          | -103.8755          | 8.5                    | 8.8               | 500                 | 9            | 2                        |                  | 0      | 0   | 2                 | Left burner on.   |
| 19:18:14              |            | 46.16284          | -103.8705          | 8.8                    | 8.6               | 500                 | 8            | 2                        |                  | 0      | 0   | 2                 |   |
| 19:24:02              |            | 46.08157          | -103.8015          | 8.8                    | 8.5               | 500                 | 7            | 3                        |                  | 0      | 0   | 2                 |   |
| 19:34:03              |            | 46.12040          | -103.8404          |                        | 8.3               |                     |              |                          |                  | 0      | 0   | 2                 |   |
| 19:40:25              |            | 46.10882          | -103.7622          | 8.5                    | 8.1               | 500                 | 9            | 3                        |                  | 0      | 0   | 2                 |   |
| 19:47:47              |            | 46.21854          | -103.8332          | 8.8                    | 8.5               | 800                 | 9            | 3                        |                  | 0      | 0   | 2                 |   |

## \*\*PRECIPITATION INTENSITY

- 0 - No Precipitation
- 1 - virga only, precip not to ground
- 2 - rain shaft to surface, light
- 3 - rain shaft well established, but can be seen through
- 4 - heavy rain shaft, cannot be seen through

## MISSION SUMMARY

Launched to the West toward developing cells. Found inflow and lit a burner. As requested by meteorologists, started a second burner once some of the cells became a hail threat. Followed the line of cells as it moved toward Bowman. Continued seeding with both burners until one burner went out, then seeded with one burner. Moved to a cell just north of Bowman and seeded until second burner went out. RTB to Bowman once cells passed the airport to refill chemical and fuel.



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| Time<br>(HH:MM)       | EVENT<br># | LATITUDE<br>(deg) | LONGITUDE<br>(deg) | CLD BASE<br>(kft)      | ALTITUDE<br>(KFT) | UPDRAFT<br>(FT/MIN) | TEMP<br>(°C) | PRECIP<br>CODE**        | DRY ICE<br>(sec) | FLARES |     | WINTIP<br>GEN (#) |   |
|                       |            |                   |                    |                        |                   |                     |              |                         |                  | EJC    | BIP |                   |   |
| 19:48:22              | 3          | 46.23927          | -103.8444          | 8.8                    | 8.6               | 800                 | 8            | 3                       |                  | 0      | 1   | 2                 | BIP lit.  |
| 19:58:23              |            | 46.14180          | -103.6787          |                        | 8.1               |                     |              |                         |                  | 0      | 0   | 2                 |   |
| 20:06:00              |            | 46.14957          | -103.6415          | 8.5                    | 8.1               | 600                 | 8            | 3                       |                  | 0      | 0   | 2                 |   |
| 20:14:58              |            | 46.10646          | -103.6028          | 8                      | 7.7               | 500                 | 7            | 4                       |                  | 0      | 0   | 2                 |   |
| 20:24:59              |            | 46.16716          | -103.6075          |                        | 8.5               |                     |              |                         |                  | 0      | 0   | 2                 |   |
| 20:26:18              |            | 46.17274          | -103.5801          | 8.7                    | 8.5               | 400                 | 7            | 4                       |                  | 0      | 0   | 2                 |   |
| 20:36:23              |            | 46.22386          | -103.5883          |                        | 8.1               |                     |              |                         |                  | 0      | 0   | 2                 |   |
| 20:39:27              | 4          | 46.12352          | -103.4504          | 8.8                    | 8.8               | 600                 | 7            | 4                       |                  | 0      | 0   | 1                 | Right burner off.   |
| 20:49:28              |            | 46.13312          | -103.4067          |                        | 7.8               |                     |              |                         |                  | 0      | 0   | 1                 |   |
| 20:57:50              | 5          | 46.13956          | -103.5473          |                        | 7.9               |                     | 7            |                         |                  | 0      | 0   | 0                 | Left burner off.  |
| 21:02:57              | 6          | 46.24659          | -103.3769          | 8.5                    | 8.1               | 300                 | 6            | 3                       |                  | 0      | 0   | 1                 | Left burner on.   |
| 21:12:57              |            | 46.21606          | -103.2598          |                        | 8.2               |                     |              |                         |                  | 0      | 0   | 1                 |   |
| 21:14:26              | 7          | 46.18100          | -103.3330          | 8.5                    | 8.1               | 400                 | 7            | 3                       |                  | 0      | 0   | 0                 | Left burner off.  |

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